

Institute for Nuclear Energy Science and Technology (I-NEST)

DOE has designated the Idaho National Laboratory (INL) as the national nuclear laboratory and uses it to provide leadership to and coordination of the Department's nuclear energy research programs. INL's role in nuclear R&D includes the establishment of strong partnerships between other national laboratories, industry, and national universities that are necessary to implement the Department's nuclear energy mission and vision. INL seeks to leverage the capabilities of industry, national laboratories, and international research organizations and applying those capabilities to the Department's nuclear energy research programs.

A rebirth of interest in nuclear energy is underway, both in the United States and across the world, driven by the concern to secure safe energy supplies and to mitigate the consequences of global climate change. Government, industry, and universities will play significant roles in realizing nuclear energy's potential. Through the *Institute for Nuclear Energy Science and Technology*, described below, INL will integrate university expertise with NE technical programs to produce outcomes relevant to the long-term interests of the nation and INL.


The Institute is created to improve alignment of the various nuclear energy research initiatives within the INL and the National University Consortium (NUC). It will seek to define the long-term nuclear energy research and development needs for the Idaho National Laboratory and the Nation by conducting cooperative research projects to address those needs. The Institute seeks to provide the technical knowledge to help define the long-term direction of the nation's nuclear energy program and prepare the next generation of nuclear scientists and engineers.

The Institute will accomplish the mission by centralizing the direction for all the above efforts into Centers of Research and Education (CORE's). In addition, the Academic Centers of Excellence (ACEs) will continue to be funded at the currently designated universities with the funding administered by the COREs. The key objectives of the Institute include:

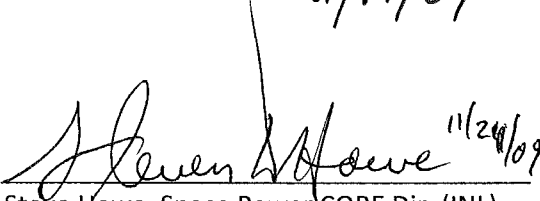
- Identifying and addressing technical nuclear energy R&D challenges over the mid-term to long-term timeframe
- Advancing the state of U.S. nuclear science and technology
- Enhancing the INL to prepare for future program expansion
- Integrating the NUC partners and INL nuclear energy R&D
- Facilitating transfer of knowledge to the next generation of nuclear scientists.

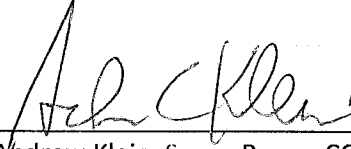
The Institute consists of a Director's office, an Institute Advisory Board and Centers of Research and Education (CORE's) dedicated to the four mission-need identified areas: Fuels and Materials Research, Space Nuclear Research, Fuel Cycle Research, and Safety and Licensing. The Advisory Board will be composed of Institute and external members and provide periodic critiques of the activities and direction of the Institute and its COREs. Each CORE will establish a steering committee to help guide the direction of the CORES and will be comprised of leaders in the respective technical areas.

The CORE will establish the steering committee, define/refine the CORE mission and topic areas, and conduct workshops central to defining research pathways. A coordinated annual review and summer institute will be developed using resources at CAES and INL. The Institute will be located at CAES, enabling it to access the physical and administrative resources of CAES. CAES assistance is expected to include communications and outreach support, administration of a research project selection process, provision of space for interns, and project management support.



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11/17/09



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11/17/09


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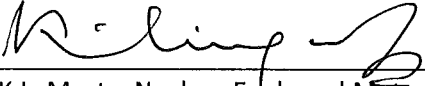

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